US 20190348187A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2019/0348187 A1**

KAMEN (43) **Pub. Date: Nov. 14, 2019**

(54) **BIOHAZARDOUS MATERIAL TRANSPORTING PIG**

(71) Applicant: **Robert KAMEN**, Toronto (CA)

(72) Inventor: **Robert KAMEN**, Toronto (CA)

(21) Appl. No.: **16/479,590**

(22) PCT Filed: **Jun. 6, 2017**

(86) PCT No.: **PCT/CA2017/050689**

§ 371 (c)(1),
(2) Date: **Jul. 20, 2019**

(30) **Foreign Application Priority Data**

Jan. 20, 2017 (CA) 2,955469

Publication Classification

(51) **Int. Cl.**

G21F 5/12	(2006.01)
A61J 1/16	(2006.01)
G21F 5/015	(2006.01)
B65D 77/04	(2006.01)
G21F 5/14	(2006.01)
B65D 85/00	(2006.01)

(52) **U.S. Cl.**

CPC ***G21F 5/12*** (2013.01); ***A61J 1/16*** (2013.01); ***B65D 85/70*** (2013.01); ***B65D 77/0493*** (2013.01); ***G21F 5/14*** (2013.01); ***G21F 5/015*** (2013.01)

(57) **ABSTRACT**

A pig for transporting a container of biohazardous material, wherein the container comprises a bottle and a bottle closure. The pig includes a body comprising a compartment dimensioned to receive the container; a cap attachable to the body for closing the compartment thereby to shieldingly contain the biohazardous material in the container, the cap including: a collar sealingly engageable with the body and having an opening therethrough in communication with the compartment thereby to provide access to the bottle closure; a cap closure sealingly engageable within the opening of the collar to sealingly close the opening and cause the bottle closure to be gripped within the cap, wherein when the collar is disengaged from the body while the cap closure is engaged within the opening of the collar, the container remains gripped within the cap. A system for transporting and providing access to a biohazardous material includes the pig and an insert sealingly engageable within the opening of the collar while the cap closure is removed, the insert comprising an injection port extending fully therethrough in axial alignment with the compartment thereby to guide insertion of a syringe centrally through the container closure and into the container. A compression member for insertion into a pig for transporting a container of biohazardous materials is also provided. The compression member includes a flange; and spaced apart fingers supported by the flange and together forming a circle, the fingers each having a substantially vertical component extending upwards from the flange and a substantially horizontal component extending inwards from an end of the substantially vertical component distal from the flange, the spaced apart fingers resiliently compressible inwardly against the container by compressive engagement of a complementary annulus of the pig into which the compression member is dimensioned to be inserted.